

Wetlands in Virginia

The Virginia Department of Environmental Quality is responsible for ensuring the protection of more than 1 million acres of tidal and non-tidal wetlands.

Wetlands of all types occur throughout Virginia. In general, wetlands are areas where water saturation (from surface water or ground water) determines soil conditions and plant communities. Although most people associate wetlands with the coast, more than 750,000 acres of the Commonwealth's wetlands are non-tidal, which means they do not fluctuate with the changing ocean tides.

Wetlands are among the most productive ecosystems in the world. Their primary functions are:

- Filtering nutrients, sediment and pollutants from the surface and ground water;
- Absorbing excess floodwater and rainwater;
- Protecting our shorelines from erosion; and
- Providing habitat to numerous plants and animals, and nursery and hatchery areas for fish and shellfish, including species that are commercially harvested.

Virginia Water Protection Permit Program

So important are wetlands to the economy and ecology of Virginia that state law requires no net loss in the amount and function of wetlands. "No net loss" means the overall number of acres and quality of wetlands must be protected. DEQ upholds this law through the Virginia Water Protection Permit Program.

This program issues permits for projects that affect state waters, including wetlands. The goal of the program is to balance the economic and growth interests of the Commonwealth with the protection of wetland resources.

Activities requiring permits include:

- Dredging (removing or relocating sediment from surface waters).
- Filling (adding material to the bottom of surface waters).



A wetland along the Chickahominy River in Virginia.

- Altering physical, chemical or biological properties of surface waters.
- Activities causing significant damage to existing wetland acreage.

If effects to wetlands are unavoidable, the permit applicant must compensate for these losses by creating or restoring wetlands, purchasing "credits" from approved wetland mitigation banks or preserving wetland buffers.

DEQ issues general and individual permits for activities that affect wetlands. General permits are issued for activities that will have a minimal effect on non-tidal wetlands. General permit projects can be elevated to an individual permit if DEQ determines the project exceeds minimal impact standards. General permits help to increase the efficiency and the speed of Virginia's permitting process; however, they are issued with the same high standards as individual permits. Individual permits are issued to projects with greater impacts on tidal and non-tidal wetlands.

After an individual permit application has been approved, a public notice announcing a public comment period on the activity must be published in a newspaper in the locality of the affected wetland. Individuals may submit written comments about the proposed activity in response to the public notice. DEQ may hold a public hearing, including another comment period, if public response is significant and there are substantial, disputed issues relevant to the proposed permit. DEQ also notifies owners of property near the affected wetland about the proposed activity.

Isolated wetlands

The Virginia Institute of Marine Science has estimated that Virginia has more than 180,000 acres of isolated wetlands. Isolated wetlands are those without an obvious connection to surface waters. Ground water and rainfall contribute the water within isolated wetlands. These wetlands perform many of the same important environmental functions as other wetlands, including recharging streams and aquifers, storing flood waters and filtering pollutants from water. Because of the isolated nature of these wetlands, they support unique and often rare plant and animal species that occur only in these habitats. Examples of isolated wetlands include Delmarva bays on the Delmarva (Delaware-Maryland-Virginia) Peninsula and Grafton Ponds in eastern Virginia.



An isolated wetland in eastern Virginia.

In 2001, the U.S. Supreme Court issued a ruling that removed federal protection from many of these wetland habitats. Because Virginia has a statewide wetland program independent of federal wetland programs, DEQ regulates all wetlands regardless of federal jurisdiction. Unavoidable impacts to isolated wetlands require a Virginia Water Protection permit and compensation for those losses.

Monitoring and voluntary restoration of wetlands

DEQ also works to increase the number of wetlands in the state through voluntary measures. Virginia has committed to restoring 6,000 new acres of wetlands within the Chesapeake Bay watershed as part of a multi-state effort to improve the health of the Bay and its tributaries. In addition, Virginia has a goal to restore 4,000 acres outside of the Bay watershed. In collaboration with other federal and state agencies and non-profit organizations, voluntary wetland restoration initiatives are under way.

DEQ also has developed a strategy to assess and monitor the condition of wetlands in Virginia. This strategy involves the use of Geographic Information System resources, field surveys and sampling events to assess wetlands throughout the state. When this multi-year effort, funded by the U.S. Environmental Protection Agency, is complete, the information will provide the general location and quality of wetlands by watershed. DEQ will then be able to make more informed decisions about permitting, restoration and mitigation efforts.

More information is available on the DEQ web site at www.deq.virginia.gov/wetlands.